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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,057	05/17/2007	David Wilson	2960-97005	8961
7590 Gerald T Shekleton Welsh & Katz Floor 22 120 South Riverside Plaza Chicago, IL 60606-3912				
			EXAMINER	
			HALL, COREY JOHN	
			ART UNIT	PAPER NUMBER
			4118	
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			02/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,057

Applicant(s)

WILSON, DAVID

Examiner

COREY HALL

Art Unit

4118

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Australia on 09/25/2003. It is noted, however, that applicant has not filed a certified copy of the 2003905237 application as required by 35 U.S.C. 119(b).

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it contains the term "said".

Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: the reference to "Figure 6a and 6" should be changed to "Figure 6a and 6b" (page 6, line 4).

Appropriate correction is required.

Claim Objections

5. Claim 17 is objected to because of the following informalities: "claim 1." should be changed to "claim 1;". Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 4-9, and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts (US Patent No. 1,482,812).

8. Regarding claims 1-2, 4-9, and 14-16, Roberts discloses a dryer for drying particulate material (page 1, lines 9-10), comprising at least one substantially vertical elongate container (figure 1) having: an upper inlet 16 (figure 1) for receiving a charge of moisture containing particulate material ("material to be dried" page 1, line 60); a lower outlet 51 (figure 1, page 2, line 94) for discharging dried particulate material (page 2, line 71), whereby said particular material travels under the influence of gravity ("gravitate" page 3, line 91) from said inlet to said outlet; two substantially vertical and opposed gas permeable walls (page 1, lines 100-101) through which a drying gas (page 2, line 32) can pass to contact said particulate material; said dryer also comprising plenums 4, 6, 7 (figure 1, page 2, lines 3-7) on exterior surfaces of said gas permeable walls, covering ingress and egress openings within said gas permeable walls, wherein the plenums are divided into zones of differing air stream properties (page 3, lines 46-48), wherein the gas permeable walls comprise vertically spaced, substantially horizontally oriented slats 8, 9 ("louvre plates" figure 1, page 1, line 101), wherein ingress openings and egress openings are respectively provided within said permeable walls (page 2, lines 3-5), wherein a plenum 7 (figure 1) covering ingress openings comprises at least one inlet 26 (figure 1) and a

plenum 6 (figure 1) covering egress openings comprises at least one outlet 32 (figure 1), wherein the at least one outlet comprises at least one extract duct 30 (figure 1), wherein drying gas (page 2, line 32) is drawn ("drawing" page 2, line 52) into the at least one inlet 26 (figure 1) by a circulator ("exhaust fan" page 2, line 51), wherein the circulator is an induced draft fan ("vacuum" page 2, lines 51-54), wherein the direction of drying gas flow through the charge of particulate material is reversed ("and again" page 2, lines 5-6) from one plenum zone to an adjacent plenum zone (page 2, lines 3-7), comprising lateral supporting members 1, 2, 3 (figure 3) joining opposing gas permeable walls (page 1, lines 80-86), wherein the supporting members are internal membrane walls 2, 3 (figure 3) that divide the dryer into a plurality of adjacent cells (page 1, lines 86-91) and a cell of a dryer (figure 3).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 1,482,812).

12. In regards to claims 11-13, Roberts discloses the claimed invention except for the dryer having a height to width ratio of at least 3:1, 5:1 or 10:1. It would have been an obvious matter of design choice to make the dryer having a height to width ratio of at least 3:1, 5:1 or 10:1, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 1,482,812) in view of Jott Australia Pty. Ltd. (WO 03/001131 A1).

14. In regards to claim 3, Roberts discloses the claimed invention, except for the gas permeable walls comprise a substantially continuous corrugated plate, wherein each corrugation comprises a supporting leg and a permeable leg angled with respect to each other, wherein said ingress and egress openings are provided within said permeable leg. However, Jott Australia Pty. Ltd. teaches corrugated plates (page 7, lines 24-25) positioned in a vertical (page 7, line 25) manner and having perforations shaped as holes (page 7, line 27) in order to dry pelletised brown coal (page 9, line 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Roberts reference, to include the gas permeable walls comprise a substantially continuous corrugated plate, wherein each corrugation comprises a supporting leg and a permeable leg angled with respect to each other, wherein said ingress and egress openings are provided within said permeable leg, as suggested and taught by Jott Australia Pty. Ltd., for the purpose of drying pelletised brown coal.

15. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 1,482,812) in view of Johnson (US Patent No. 4,337,584).

16. In regards to claim 10, Roberts discloses the claimed invention, except for a desiccator or refrigerator being provided in conjunction with the at least one outlet to recover water from drying gas exiting the dryer. However, Johnson teaches a grain dryer (column 2, line 52) that uses an evaporator 38 (figure 1) of a refrigeration system (column 3, lines 16-17) and a condensate collecting tray 42 (figure 1, column 3, lines 18-19) at the exit 78 (figure 1) of the dryer 10 (figure 1) in order to remove excess moisture from the drying air (column 4, lines 16-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Roberts reference, to include a desiccator or refrigerator in conjunction with the at least one outlet to recover water from drying gas exiting the dryer, as suggested and taught by Johnson, for the purpose of removing excess moisture from the drying air.

17. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 1,482,812) in view of States (US Patent No. 5,263,817).

18. Regarding claim 17, Roberts discloses a drying plant comprising: (b) at least one conveyer 18 ("screw conveyor" figure 1, page 2, line 18) for conveying said surface conditioned material to an inlet 16 (figure 1) of a dryer according to claim 1; (c) a collection surface 22 (figure 1, page 2, line 25) for retrieving dried particulate material from the dryer; and (d) a particulate material remover 23 (figure 1, page 2, line 28) for removing dried particulate material from said collection surface, except for (a) a conditioning bed for subjecting moisture containing particulate material to surface conditioning. However, States teaches running material through a

conditioner 28 (figure 2) before feeding the material into a dryer 30, 42 (figure 2, column 3, lines 63-64) in order to get the feed material above an optimum surface condition (column 2, lines 24-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Roberts reference, to include a conditioning bed for subjecting moisture containing particulate material to surface conditioning, as suggested and taught by States, for the purpose of getting the feed material above an optimum surface condition.

19. Claims 18, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 1,482,812) and States (5,263,817) in view of Murty (US Patent No. 4,157,314).

20. In regards to claim 18, Roberts and States disclose the claimed invention, except for a compactor for production of brown coal containing compacted bodies. However, Murty teaches brown coal (column 3, line 6) being compressed into pellets (abstract, line 18) by a compactor (column 10, line 43) in order to increase the density of the coal (column 10, line 68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Roberts and States references, to include a compactor for production of brown coal containing compacted bodies, as suggested and taught by Murty, for the purpose of increasing the coals density.

21. In regards to claim 19, Roberts, States and Murty disclose the claimed invention including from Murty a compactor comprising a mixing/conditioning device and a pelletiser. Murty teaches a compactor (column 10, line 43) that is mixed ("stirred" column 10, line 30) and conditioned (column 10, lines 29-30 and line 34) and then crushed in a rotary mill to form mesh granules (column 10, lines 50-51) in order to create compressed pellets (abstract, line 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Roberts, States and Murty references, to include the compactor comprising a mixing/conditioning device and a pelletiser, as suggested and taught by Murty, for the purpose of creating compressed pellets.

22. In regards to claim 21, Roberts, States and Murty disclose the claimed invention, including from Murty a method of drying brown coal which comprises introducing brown coal fines into a drying plant according to any one of claims 17 to 19. Murty teaches a method (column 12, line 56) for drying granules (column 12, line 67) of coal (column 12, line 65), including brown coal (column 3, line 6) in order to reduce the moisture content (column 12, line 68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Roberts, States, and Murty references, to include a method of drying brown coal which comprises introducing brown coal fines into a drying plant according to any one of claims 17 to 19, as suggested and taught by Murty, for the purpose of reducing the moisture content.

23. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (US Patent No. 1,482,812) in view of Murty (US Patent No. 4,157,314).

24. Regarding claim 20, Roberts discloses a dryer (page 1, lines 9-10) comprising at least one substantially vertical elongate container (figure 1) having: an upper inlet 16 (figure 1) for receiving a charge of brown coal containing pellets; a lower outlet 51 (figure 1, page 2, line 94) for discharging dried pellets of brown coal, whereby said pellets travel under the influence of gravity ("gravitate" page 3, line 91) from said inlet to said outlet; two opposing substantially vertical gas permeable walls (page 1, lines 100-101) through which a drying gas (page 2, line 32)

can pass to contact said pellets; said dryer also comprising plenums 4, 6, 7 (figure 1, page 2, lines 3-7) on external surfaces of the gas permeable walls covering ingress and egress openings within the gas permeable walls, wherein the plenums are divided into zones of differing air stream properties (page 3, lines 46-48) and wherein the direction of drying gas flow through the charge of brown coal containing pellets is reversed ("and again" page 2, lines 5-6) from one plenum zone to an adjacent plenum zone (page 2, lines 3-7); the dryer comprising lateral internal membrane walls 1, 2, 3 (figure 3) joining opposing gas permeable walls (page 1, lines 80-86) that divide the dryer into a plurality of adjacent cells (page 1, lines 86-91), except for a dryer for drying pellets containing brown coal. However, Murty teaches drying granules (abstract, line 12) of brown coal (column 3, line 6) in order to create compressed pellets (abstract, line 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the Roberts reference, to include a dryer for drying pellets containing brown coal, as suggested and taught by Murty, for the purpose of creating compressed pellets.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to COREY HALL whose telephone number is (571)270-7833. The examiner can normally be reached on Monday - Friday, 9AM to 5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quang Thanh can be reached on (571)272-4982. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. H./
Examiner, Art Unit 4118

/Quang D. Thanh/
Supervisory Patent Examiner, Art Unit
4118